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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/043,241 01/14/2002 Matthias Bratz 42044 Cont. 1890 **EXAMINER** 07/05/2006 26474 7590 NOVAK DRUCE DELUCA & QUIGG, LLP QAZI, SABIHA NAIM 1300 EYE STREET NW ART UNIT PAPER NUMBER **SUITE 400 EAST TOWER** WASHINGTON, DC 20005 1616

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/043,241	BRATZ ET AL
	Examiner	Art Unit
	Sabiha Qazi	1616
The MAILING DATE of this communication appears on the cover sheet with the correspondence address		
Period for Reply		
<ul> <li>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>		
Status		
1)⊠ Responsive to communication(s) filed on <u>28 February 2006</u> .		
	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>10-17 and 19-23</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)  Claim(s) <u>10-17 and 19-23</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9) The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary (	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)

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#### Non-Final Office Rejection

Claims 10-17 and 19-23 are pending. No claim allowed at this time.

# **Response to Arguments**

• The 101 rejection: The Applicants' concern over the processing of the terminal disclaimer has been duly noted. The Examiner directs Applicants to MPEP 1490, which states that the statutory disclaimer (filed with the Brief) must be *processed and approved* by the Certificate Of Correction Branch. Until the disclaimer is approved and processed by the Branch, the rejection will be maintained.

The Applicants need to send the request to the Certificate of Correction Branch.

- Claims 22 and 23 (in part): On Applicants' request, claims 22 and 23 will be examined entirely.
- GARST rejection: The rejection is withdrawn, as arguments are found persuasive.
- MALIK/DUPONT rejection: The rejection is withdrawn, as arguments are found persuasive.

#### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-17 and 19-21 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-9 of prior U.S. Patent No. 6,482,772. This is a double patenting rejection. Presently claimed invention is drawn to a solid mixture of sulfonylurea and an alkylpolyglycoside, their preparation and method of use for controlling undesirable plant growth, same invention is claimed in US '772. The claims are <u>EXACTLY</u> the same.

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 11-17 and 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Following reasons apply:
- 3. It is unclear what is the meaning of "alkylpolyglycoside" in claims? What is the meaning of degree of polymerization in claims 15 and 16 where the degree of polymerization can be 1.

#### Claim Rejections - 35 USC § 112 - First Paragraph Rejection

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-17 and 19-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a certain sulfonylurea herbicide (metsulfuron methyl in Example 16 on page 32 of the Specification), does not reasonably provide enablement for *all* sulfonylurea herbicides. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ 150, 153 (CCPA 1977), have been clarified by the Board of Patent Appeals and Interferences in Ex parte Forman, 230 USPQ 546 (BPAI 1986), and are summarized in In re Wands (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

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(1) The nature of the invention: The claims are drawn to a solid mixture comprising a sulfonylurea herbicide and an alkylpolyglycoside.

(2) The predictability or unpredictability of the art: There is lack of predictability in the in the art. Claims are broad and are drawn to any sulfonylurea herbicide, which encompasses thousands of compounds. For example, see the Formula in claim 11 where Z is nitrogen or carbon. Similarly see the Formula in claim 22, where J can be different heterocyclic and non-hetrocyclic groups. All of these compounds encompass thousands and thousands of compounds. The specification does not have the support for such a wide variety of compositions and methods of the compounds.

The following are all sulfonylureas. The compounds belong to different classes.

Metsulfuron methyl

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Primisulfuron

(3) The amount of direction or guidance presented: There is no guidance in the disclosure on how to use the invention successfully with *all* sulfonylurea herbicides, just metsulfuron-methyl (example 16).

In re Dreshfield, 110 F.2d 235, 45 USPQ 36 (CCPA 1940), gives this general rule: "It is well settled that in cases involving chemicals and chemical compounds, which differ radically in their properties it must appear in an applicant's specification either by the enumeration of a sufficient number of the members of a group or by other appropriate language, that the chemicals or chemical combinations included in the claims are capable of accomplishing the desired result."

The courts have further interpreted undue experimentation as requiring "ingenuity beyond that to be expected of one of ordinary skill in the art" (Fields v. Conover, 170 USPQ 276 (CCPA 1971)) or requiring an

extended period of experimentation in the absence of sufficient direction or guidance (<u>In re Colianni</u>, 195 USPQ 150 (CCPA 1977)). Additionally, the courts have determined that "... where a statement is, on its face, contrary to generally accepted scientific principles", a rejection for failure to teach how to make and/or use is proper (In re Marzocchi, 169 USPQ 367 (CCPA 1971).

(5) The presence or absence of working examples: There are no working examples and/or data to support the invention as presently claimed with *all* sulfonylureas; there is only one example to support metsulfuron. The disclosure does not contain working examples to support <u>all</u> sulfonylurea herbicides, only metsulfuron-methyl, as claimed.

A disclosure should contain representative examples, which provide reasonable assurance to one skilled in the art that the compounds fall within the scope of a claim will possess the alleged activity. See In re Riat et al. (CCPA 1964) 327 F2d 685, 140 USPQ 471; In re Barr et al. (CCPA 1971) 444 F 2d 349, 151 USPQ 724.

It has been established by the Courts that a single species is seldom, if ever, sufficient to support a generic claim. *In re Shokal*, 242 F.2d 771, 113 U.S.P.Q. 283, 285 (C.C.P.A. 1957). See also, <u>In re Grimme</u>, 274 F.2d 949, 124 U.S.P.Q. 499, 501 (C.C.P.A. 1960) (the naming of a member of a genus or subgenus is not a proper basis for claiming the whole group).

Objective evidence of nonobviousness must be commensurate in scope with the scope of the claims. *In re Tiffin*, 171 USPQ 294. A showing limited to a single species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims.

(6) The quantity of experimentation necessary: Since there is no guidance and/or direction provided by the Applicants in the disclosure to support for a solid mixture containing *all* sulfonylurea herbicides as claimed, one skilled in the art at the time of invention would have to go through undue experimentation to make and/or use the presently claimed invention.

The first paragraph of 35 USC 112 requires "...such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains..." The instant invention fails to meet this requirement, as it lacks such

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full, clear, and concise manner as to enable any person skilled in the art to which it pertains to make and/or use the invention.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10-17 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over KOCUR et al<sup>1</sup>. KOCUR et al teaches liquid herbicidal compositions comprising a compound of the Formula (I) and an alkyl polyglycoside and at least one surfactant. KOCUR et al teaches that the surfactants mentioned can be employed

<sup>&</sup>lt;sup>1</sup> US Patent No. 5,258,358. Published November 2, 1993. See the entire document, especially Formula (I) in col. 1, lines 55-59 in col. 2, lines 29-35 in col. 3, Table 1 in col. 3 and 4, claims, and examples.

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advantageously in combined formulations of I with other herbicidal active substances such as sulfonylureas like DPX-L-5300, thiameturon-methyl, metsulfuron-methyl, or nicosulfuron (Ishihara), where they can enhance the action of L<sup>2</sup>

Instant claims differ from KOCUR et al in that KOCUR teaches the combination compound of Formula I with alkylpolyglycosides and sulfonylureas in liquid form, whereas the instant claims are drawn to comprising a combination of alkylpolyglycosides and sulfunonylureas in solid form.

One skilled in the art would have been motivated at the time of invention to make the composition of alkylpolycloside and sulfonylurea herbicides as presently claimed because the KOCUR et al teaches the effective and advantageous combination of alkylglycosides and sulfonylurea herbicides and glufosinate. The instant invention is drawn to the same combination minus glufosinate, but the term "comprising" allows additional ingredients to be added. Also, the motivation is provided by KOCUR because it teaches the combined formulations sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle.<sup>3</sup>

The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., >Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003) ("Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948) ("comprising" leaves "the claim open for the inclusion of unspecified ingredients even in major amounts").

Compositions can be prepared in solid forms or liquid forms.

The Examiner notes that one example has been disclosed by the Applicants to show the stability of sulfonylurea. However, KOCUR et al teaches that the combined formulations containing sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle.<sup>4</sup>

 <sup>&</sup>lt;sup>2</sup> See lines 55-59 of col. 2,
 <sup>3</sup> See lines 29-31 in col. 3.
 <sup>4</sup> See lines 29-31 in col. 3.

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In the absence of any criticality and/or unexpected results, the instant invention is considered *prima facie* obvious over KOCUR et al.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

# Data in the Specification

The data in the specification has been considered y the Examiner. The example 16 is drawn to sulfonyl urea metasulfuron-methyl. It has been established by the Courts that a single species is seldom, if ever, sufficient to support a generic claim. *In re Shokal*, 242 F.2d 771, 113 U.S.P.Q. 283, 285 (C.C.P.A. 1957). See also, <u>In re Grimme</u>, 274 F.2d 949, 124 U.S.P.Q. 499, 501 (C.C.P.A. 1960) (the naming of a member of a genus or subgenus is not a proper basis for claiming the whole group).

Objective evidence of nonobviousness must be **commensurate** in scope with the scope of the claims. *In re Tiffin*, 171 USPQ 294. A showing limited to a single species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims.

Even if the data would have been presented, KOCUR et al teaches that the combined formulations containing sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle.

# **Communication**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi, Ph.D. whose telephone number is 571-272-0622. The examiner can normally be reached on any business day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Johann Richter, Ph.D. can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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SABIHA QAZI, PH.D PRIMARY EXAMINER

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